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MANPOWER SHORTAGE AND THE GERMAN COLLAPSE IN 1918

Description

Excerpts from three past memoranda, indicating the preeminent role played by the manpower shortage in the German collapse in 1918.

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SUMMARY

1. Excerpts from three previous memoranda indicate clearly that the principal cause of the German collapse in 1918 was the serious shortage of combat manpower, which paralyzed freedom of military action and made further conduct of the war impossible.

2. At the time the previous memoranda quoted here were prepared, the German manpower position closely paralleled that of 1918. Since that time increasing losses have rendered Germany's combat manpower position, both in absolute numbers and in comparison with its enemies, considerably worse than in 1918.

MANPOWER SHORTAGE AND THE GERMAN COLLAPSE IN 1918

I. INTRODUCTION

The present study brings together excerpts from three memoranda prepared in the Research and Analysis Branch between April and September 1943. All three relate to the German manpower position toward the end of World War I, and indicate the role played in the German collapse in 1918 by the serious shortage of combat manpower, which once more threatens to be a major factor in the defeat of Germany.

The first of the three excerpts is taken from a working memorandum prepared 24 April 1943 and entitled "The German Manpower Position, 1918 and 1943." It is presented in Section II below, together with a newly prepared prefatory note bringing the comparison down to June 1944.

The second excerpt, in Section III, is from a working memorandum of 14 April 1943 entitled "The Replacement Situation in the German Army, 1917/18."

The third excerpt, from R&A No. 1085, "German Manpower in the Summer of 1943," is dated 4 September 1943, and is presented in Section IV.

II. THE GERMAN MANPOWER POSITION, 1918 AND 1943 - 1944

A. Prefatory Note

The following comparison of 1918 and 1943 was completed more than a year ago, and the figures given for the 1943 posi-

tion have, of course, been superseded. Subsequent information has tended to confirm the estimates of German losses made at that time, and also the general appraisal of the German manpower position.

German permanent losses to 1 April 1944 are estimated at about 5.8 millions, compared with losses to 30 July 1918 of about 2.7 millions. The present position of the Germans in respect to combat manpower is considerably worse, both in absolute terms and compared with the enemy position, than it was in mid-summer, 1918.

Excerpts from the paper of 24 April 1943 are given in parts B through E below.

B. Manpower Shortage and the German Collapse in 1918

The causes of the German collapse in 1918 were thoroughly investigated by a Commission of the German Constituent Assembly (1919-1928) which collected the relevant contemporary documents and also heard statements from representatives of the German High Command, from representatives of the main political groups, and from independent critics of official policy. The report of the Commission covered in great detail the events of 1918, and it leaves little doubt about the principal reasons for the downfall of the German Empire.

All of the evidence points to the fact that it was the failure of the supply of men to replace casualties

in the Field Army which led to the defeat of Germany. The problem of replacements was already causing trouble in the fall of 1917, and the dispatches of the High Command at that time reveal the alarm of the German leadership and their fears for the future on this account.

General von Kuhl, who represented the German High Command, gave before the Commission an extended analysis of the origins, execution, and collapse of the offensive of 1918. In discussing the problems confronting the High Command, von Kuhl gives his main, and almost his exclusive, attention to the replacement problem. The only problem of supply touched on in von Kuhl's statement was the lack of tanks on the German side, a lack which von Kuhl attributed to a failure on the part of the High Command to recognize early enough the potential value of this weapon.

In general, the High Command was satisfied with the amount and quality of armaments available for the 1918 offensive. This is clear from von Kuhl's statement, and it is also the conclusion reached by the majority of the Commission.

The performance of the German troops was also satisfactory during the 1918 offensive. In spite of the exhaustion resulting from four years of war, the troops displayed brilliant dash in the offensive. They were well prepared by careful training for the task.

In sum, it is clear that supply difficulties were of secondary importance among the causes of failure of the German offensive of 1918. Nor was the performance of the troops in any way responsible for the failure. The essential cause of the German defeat was the failure of the supply of replacements.

The effect of the failure of the supply of replacements may be seen in the attached chart which shows the prescribed and the actual strength of the German Field Army and the actual strength of the occupation army up to 31 July 1918. It shows clearly that the losses incurred in the 1918 offensive could not be replaced. As a result, the front-line strength of the German Army began to decline disastrously by May 1918. The actual decline was even more rapid than is indicated by the graph, as missing men were counted as part of the actual strength for a full three months after their disappearance.

According to von Kuhl's account, it was mainly the weakness of the German front-line forces which was responsible for the success of the Allied tank attacks. The thin and exhausted German lines began to break in the face of superior numbers of the enemy and incessant tank attacks. Von Kuhl remarks that massive tank attacks had been used by the Allies as early as the spring of 1917. The Nivelle offensive, for instance, used two

hundred tanks, but the Germans were able to deal with these tanks without special difficulty and the offensive was a failure.

C. The Supply Position, 1918 and 1943

The war preparations of the Nazi regime were undoubtedly more thorough than were those of the German Empire. The Nazis had largely succeeded in freeing Germany from dependence on imported foodstuffs. Stockpiles of strategic materials were undoubtedly larger in 1939 than they had been in 1914. Synthetic processes are of course greatly developed compared with 1914. Germany has under control a much more extensive area in 1943 than in 1918.

All in all, Nazi Germany is in a much stronger position to resist blockade and attrition than was the German Empire of the Hohenzollerns. Yet even the Germany of 1918 was able to provide its troops with adequate equipment of good quality for the 1918 offensive. There is certainly nothing in the 1918 experience to suggest that difficulties in the supply of armaments will contribute to the defeat of the German armies.

D. The Manpower Position, 1918 and 1943

The inadequate supply of men fit for combat duty is the principal weakness in the German position in 1943 as it was in 1918. In 1913 out of a total population of 68 million, Germany had 9.4 million men between 18

and 34. In 1939, out of a population of 80 million, there were 10.8 million men between 18 and 34. Men 14-17, inclusive, numbered 2.7 million in 1913, the same number as in 1939. Men 35 to 48, inclusive, numbered 5.6 millions in 1913, compared with 7.5 million in 1939.

The number of men of age suitable for combat duty, 18 to 34, inclusive, thus increased by 1.4 million between 1913 and 1939. The prospective classes -- boys 14 to 17, inclusive -- were about the same in each case. The distribution by individual classes is indicated in Table 1 on the following page.

Inasmuch as the greatest increase in manpower occurred in the age group 35 to 48, a special comment is called for on the possible value of these older men. Up to October 1942, about 95 percent of all killed in the German army were men aged 34 and under. If men 35 and over could have been used effectively for combat operations, the Germans would probably have used the older men more intensively than they have, because the continued concentration of losses in the younger age group will create serious population problems for the future. The presumption must be that men over 35 are much less effective in combat than are younger men.

Total permanent losses in the German armed forces up to 1 March 1943 are estimated at 3.25 millions. This compares with permanent losses of the German army in the World War up to 30 July 1918 of 2,7 millions. Permanent

Table 1. GERMAN MALE POPULATION BY AGE, 1913 AND 1939

(in thousands)

Age	On 1 December 1913	On 1 January 1939
14	686	654
15	699	658
16	681	690
17	681	736
18	649	749
19	647	570
20	637	375
21	611	363
22	605	401
23	589	534
24	567	683
25	565	702
26	551	726
27	532	694
28	526	726
29	514	740
30	492	740
31	499	728
32	477	724
33	485	694
34	482	698
35	482	678
36	480	695
37	477	677
38	464	647
39	443	603
40	425	565
41	420	529
42	344	505
43	390	471
44	377	451
45	355	446
46	343	430
47	348	437
48	326	419
14-17 inclusive	2,747	2,738
18-34 inclusive	9,428	10,847
35-48 inclusive	5,674	7,553
TOTAL	17,849	21,138

losses up to the start of the 1918 offensive were about 2.3 millions.

Thus the position in regard to Manpower in the spring of 1943 is similar to the position in the spring of 1918. Germany entered the present war with a manpower pool of combat age larger by about 1.4 millions than the World War pool. But up to 1 March 1943, German permanent losses were higher by almost one million than German World War losses up to March 1918. In absolute terms, Germany is better off by only 400,000 men of combat age than she was in March 1918. In comparison with the resources of the enemy, the German position is certainly no better than the March 1918 position. The analogy with the 1918 position thus has considerable force. Germany has the human and material resources for another great offensive, such as the offensive of the spring of 1918. Such an offensive might well succeed in knocking out a major enemy just as the 1918 offensive nearly resulted in a decisive victory for Germany. On the other hand, if the impending German offensive can be held, the German position will from then on deteriorate rapidly. The Germans will in that event be unable to find adequate replacements for their permanent losses. Exhaustion and discouragement will become general among the German combat troops, as it did in August 1918.

E. CONCLUSION: GERMAN MILITARY PROSPECTS, MARCH 1918 AND APRIL 1943

In appraising the strategic prospects before Germany at present, the analogy of World War experience naturally suggests itself. There is convincing evidence that the German collapse in 1918 was a result of the failure of the supply of replacements for military losses; difficulties in the supply of war materials were of secondary importance. The German supply position is probably much better on the whole in 1943 than it was in 1918. On the other hand, the manpower position in the spring of 1943 is little stronger than it was in March 1918. The analogy with the 1918 experience therefore has considerable force. The Germans undoubtedly have sufficient military manpower to launch another massive offensive this summer [1943], as they did in March 1918. If such an offensive should succeed in knocking out a major enemy, the Germans would then be in a position to solve their manpower problems without great difficulty. The great offensive of 1918 very nearly resulted in a decisive victory for Germany. The German High Command at present may entertain a reasonable hope of achieving decisive results with an offensive this summer [1943]. If, however, such an offensive is attempted and fails, the German position will deteriorate rapidly as it did after July 1918. Failure of replacements in the face of constantly growing enemy

strength will lead to exhaustion and discouragement of the German troops, and ultimately to the collapse of the German army.

III. THE REPLACEMENT SITUATION IN THE GERMAN ARMY, 1917/18

The seriousness of the military manpower situation by no means emerged suddenly towards the end of 1918. In fact, as early as October 1916 the High Command had asked without success, that the draft age be extended to cover the ages 16 to 60.[1]

During the summer of 1917 the German High Command and the War Ministry took an increasingly pessimistic view of the situation. Thus in the fall of 1917 the War Ministry estimated that available manpower supplies would last through July 1918 and no longer. Among these supplies were included the 1900 class with 200,000 men, the returning casualties with 60,000 per month, 300,000 men from the occupation army, and 200,000 men from deferred occupations. On the basis of this calculation, the only source of replacements left after July 1918 was from returning casualties.

In December 1917 a new survey was made revealing a manpower deficit for 1918 of 354,000 men, and this in

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1 Based on Entstehung, Durchfuehrung and Zusammenbruch der Offensive von 1918, by General v. Kuhl, Berlin, 1927. This is a special edition of the testimony given by v. Kuhl before the Reichstags commission investigating the causes of the German collapse.

spite of a lower monthly requirement quota and an increase in the estimated yield of the 1900 class.

The impact of the shortage is evidenced in a letter written by the Chief of the General Staff of the Field Army on 10 September 1917 in which the phrase occurs: "The replacement problem even at this time severely paralyzes freedom of military action."

Replacement possibilities by transfer of men from the Eastern Front were narrowly circumscribed by the composition of the Eastern armies, made up of less reliable men, with age, regional origin (Alsace-Lorraine) or "infection" by proximity to the Russian Revolution as contributory causes. The only real reservoir therefore lay in the deferred occupations.

The number of men deferred for occupational reasons on 1 January 1918 amounted to 2,154,387, of whom 1,097,108, or 51 percent , were fit for full military service. A rigid comb-out during the last quarter of 1917 and another during the first quarter of 1918 yielded 30,000 men each. This increase in available military manpower, however, was more than offset by the simultaneous granting of over 180,000 new occupational deferments, so that by the end of the first quarter of 1918 the number of deferments had actually increased by 123,000.

On 15 May 1918 it was estimated that no more than 100,000 men would be obtained from the ranks of

those deferred for physical or occupational reasons. It was further decided to comb out the special services of the Army and the Occupation Army. From all these sources an immediate supply of 60,000 was ordered to be made available (as contrasted with the previous estimated monthly replacement quotas of 150 - 160,000).

By August 1918 the situation had deteriorated beyond previous expectations, due to the heavy German losses sustained in the summer campaign. As many as 52 divisions had fallen below the 600 men per battalion limit, the permissible minimum according to the Chief of the General Staff of the Field Army. An immediate quota of 200,000 men was needed to bring the Western Field Army to a battalion strength of 700 men plus 600 recruits, while a monthly replacement quota of 80,000 would be needed to keep them at that level. "If these demands cannot be met, prosecution of the war in the present manner becomes impossible," stated the Chief of the General Staff.

One solution, even though only a partial one, was the call-up of the 1900 class. However, it was estimated that no more than 304,000 members of that class would be available, with 35,000 of them in deferred jobs. This would indicate that at least half the class had already volunteered. A consultation between the War Ministry and the High Command (7 September 1918) concluded that no more than 40 - 50,000 a month

could be made available for the next six months, the bulk of whom would have to come from industry. That this comb-out would constitute a heavy burden on war production, was recognized: half of the deferred were in coal mining and railroads, half in munitions industries and agriculture.

Battalion strength continued to sag. From 650 in August it fell to 570 in September and reached a low of 450 by the end of October. It was at that time (1 November) that the first contingents of the 1900 class were sent to the front lines, only six months after the 1899 class had been sent into combat. The monthly deficit in October was estimated by Ludendorff at 70,000 men. It was obvious that even the black forecasts made in the summer of 1918 had been too optomistic. "It is easily understood," says von Kuhl, "that under those conditions in the summer and fall of 1918 enemy tanks scored decisive results against the thinly held lines of the exhausted German troops."

IV. GERMAN MANPOWER IN THE SUMMER OF 1943: THE ARMED FORCES AND THE CIVILIAN LABOR FORCE

A. Military Manpower

German losses in the present war up to 1 July 1943 were already considerably higher than total German losses in the war of 1914-1918. These losses are compared in Table 1.

On the other hand, Germany entered the present war with a pool of military manpower considerably larger than the 1913 pool. In 1913 out of a total population of 68 million, Germany had 9.9 million men aged 18 to 35, inclusive; in 1939 out of 80 million population there were 11.5 million aged 18 to 35, inclusive. The prospective new classes, men 14 to 17 inclusive, numbered 2.7 million in 1913 and the same in 1939. Men 36 to 48 inclusive numbered 5.2 million in 1913, compared with 6.8 million in 1939; but as men of these ages are in general poorly suited to combat duty, the main advantage to Germany in the 1939 position was the gain of 1.6 million men in the best combat ages.

German losses in the present war up to 1 July 1943 have been greater by about 650,000 men than total losses in the last war, but German reserves in 1939 were greater by 1.6 million than 1913 reserves of men. The Germans therefore had on 1 July about 950,000 more men of combat ages than they had at the time of the Armistice in 1918. The present position of the German armed forces in respect to reserves and replacements is closely parallel to the position in March 1918.

It is of special interest, therefore, to follow the trend in the strength of the German Army in the months after March 1918. From 15 March to 15 July 1918, the actual strength of the German Field Army fell by an average of 220,000 men per month, from 5,110,000 to 4,227,000,

representing an average monthly decline of 4.3 percent in strength. By mid-July 1918, the actual strength of the Field Army was fully 20 percent under prescribed strength, in spite of the attempts made by the High Command to keep units up to strength through the disbanding of a number of divisions and distribution of the personnel to remaining units. The best divisions, which were bearing the full weight of the Ludendorff offensive, were of course much worse off by mid-July; many of the units were of half strength or less.

The results of this situation appeared in the form of long-continued overexertion of the German troops, exhaustion, and discouragement. When the Allied counter-offensive began on 8 August 1918, it achieved decisive results because (1) the German units were undermanned and did not function at their former level of effectiveness, (2) the German front was too thinly held to resist the Allied attacks with tanks and numerically superior forces, (3) the German troops were exhausted and discouraged and did not fight with the same spirit which they had hitherto displayed.

The strength of the present army (not counting the ground forces of the Luftwaffe) is believed to have been 6.8 million on 1 June 1942. By 1 March 1943, it is estimated that army strength had fallen to 6.2 million. During the spring of 1943, it is believed that the Germans made efforts to replace their winter losses, and they

Table 1. Permanent Losses in the German German Armed Forces

(in thousands of men)

	2 August 1914- 11 November 1918 (1)	1 September 1939- 30 June 1943 (2)
ARMY		
Permanent battle losses		
a Killed	1,598	1,880
b Missing	-	677
c Prisoners of war	840	292
d Unfit for further service	380	620
e Total	2,818	3,469
Permanent non-battle losses		
a Deaths	152	91
b Unfit for further service	381	228
c Total	533	319
AIR FORCE[1] AND NAVY		
Permanent battle and non-battle losses	39	255
TOTAL PERMANENT LOSSES (battle and non-battle)	3,390	4,043

1 Losses in the Air Force in the last war are included under the Army.

probably succeeded in bringing actual strength back to the level of 6.8 million by 1 June 1943. Of the 6.8 million strength of 1 June 1943, about 2 million were in replacement units, line of communications units, frontier guards, and other units roughly corresponding to the 1918 Occupation Army. The forces of the present German Army corresponding to the 1918 Field Army numbered about 4.8 million on June of this year [1943]; to this should be added about 300,000 men in the field divisions of the Luftwaffe who are available for ground combat duty. The available combat forces on 1 June 1943 therefore numbered about 5.1 million, about the same combat strength as the German Field Army on 15 March 1918.

Since 1 July 1943 German permanent battle losses have been running at a rate estimated at 175,000 men per month. In addition it is estimated that deaths, discharges, and assignments to rear units on account of disease and aging have been running at a rate of 25,000 per month.

The main source of replacements for 1943 is the class of 1926, now 17 years old, who numbered 627,000 in all at the beginning of the year. This class is not all available for replacement for Army combat units, however. A considerable number from this class have volunteered for officer training and for the Luftwaffe, while still others will be assigned to the Navy. At least 50,000 will have been drawn off in this

manner. The remainder would supply about 46,000 men per month, on the average, during 1943.[1]

An additional 4,000 men per month could be found by combing out rear units and cancelling deferments. The net decline in first-line combat strength of the German army is therefore estimated at 150,000 per month.

On 1 August 1943, first-line combat strength was 4.8 million on this estimate, and by 1 October 1943 first-line strength will have declined to 4.5 million.

In order to inflict total losses on the Germans comparable to those suffered in the spring of 1918, it would apparently be necessary for the Allies to undertake operations against the Germans on a large scale. Assuming that the Soviet forces maintain the present level of operations, the Allies would need to inflict about 70,000 casualties per month on the German forces in order to push the rate of loss up to the 1918 level.

Net losses of 220,000 men per month would represent a decline of about 5 percent per month in German combat

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1 It must also be remembered that while members of the class of 1926 reach 17 in 1943, members of the class of 1907 reach the age of 36 this year. The number of men in the latter group, leaving the prime combat age span, is at present greater than the number entering the age groups 17 to 35. Accordingly, the accession of 17-year olds in 1943 is heavily counterbalanced. Since German casualties have been predominantly in lower age groups, e.g., 19-30, virtually the whole of the class of 1907 is lost to the pool of combat personnel by superannuation.

strength. Such a decline over a period of 3 or 4 months would probably lead to the disintegration and collapse of the German Army.

B. Civilian Labor

In sharp contrast with the German military manpower position, the supply position for the civilian labor force has been considerably improved during the past year [June 1942-June 1943], and further improvement is in prospect. This important new development is due in the main to the success of the German program for the compulsory recruitment of foreign labor. This program has been more successful than was anticipated, and therefore estimates of German prospects for 1943 based on a continued decline in the overall labor force should be revised.

1. Foreign Workers. During the year June 1942 - June 1943, the Germans changed over their program for the recruitment of foreign labor from a mainly voluntary to a compulsory basis. By the Vichy law of 14 September 1942, French men aged 18 to 50 were made liable for compulsory labor service without restriction of location. Under this law, several hundred thousand French men have been called up, examined, and enrolled for service in Germany or with the Todt organization outside of Germany. Similar measures of compulsion have been used by the German authorities in Belgium and Holland. During the early months of 1943 by a separate decree for each area, labor

service was made compulsory throughout the German-occupied areas. Offices to enforce the decree were set up throughout occupied Soviet territories, and large numbers of Soviet citizens have been forcibly deported for work in Germany.

2. Mobilization of Internal Reserves. The German government during the past year has also undertaken to mobilize the remaining reserves of internal labor power for essential war work. A decree of 27 January 1943 required the registration of all female residents of Germany aged 17 to 45 and males aged 16 to 65 who were not gainfully employed full time. Registrants were to be examined for availability for employment and, if available, directed to essential war work.

A second decree on 4 February 1943 ordered the closing down by 15 March of all non-essential enterprises.

It is believed that the effect of these decrees has been relatively unimportant. It is unlikely that the number of women in employment can have been increased by more than 100,000 as a result of the registration. The employment rates of German women were already extremely high in 1942, and it is unlikely that many more women could be transferred from the German domestic economy.

Nor is it likely that the closing of non-essential concerns will lead to any important transfer of labor to

more essential employment. These enterprises had been losing personnel for some years, and the number of employees remaining must have been small. Furthermore, the transfer value of the remaining personnel is undoubtedly very low. Perhaps 200,000 to 300,000 sub-standard workers may have been transferred under the closing decree. These do not represent an addition to the labor force, of course, as they were already counted as gainfully active.

3. Productivity of the New Recruits. The new workers recruited during the past year [June 1942-June 1943] are probably below the German average in productivity. In the case of the internal recruits, many are part-time workers or old and unfit persons. The foreign workers in general do not work with enthusiasm. While it is impossible to estimate exactly the productivity trend, it seems nevertheless unlikely that the inherent productivity of the German labor force has fallen by as much as 5 percent since 1939 on account of the recruitment of less capable workers. This decline would probably be less than the compensating gain due to technological advance in the same period.